BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

BYATARAYANAPURA DIVISION

BYATARAYANAPURA SUB DIVISOIN

Name of the Work : **Drilling of new Borewell, Providing Pump & Motor and Pipeline at Various Places in ward no. 06 Byatarayanapura Sub Division**

Estimated Cost : **60.00 Lakhs**

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Estimate Cost Rs. 6000000.00

Name of Work : Drilling of new Borewell, Providing Pump & Motor and Pipeline at Various Places in ward no. 06 Byatarayanapura Sub Division

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	Hiring of Water Tanker for Supply of Drinking (Water tanker of 6000 liter capacity) (Page No. XLVIII, Code No. 1032) PWD SR 2018-19 Rate for 5000 liters=412*5000/6000	per day	1				1	343.33	343.33
	Hie Charges of Tractor 40 HP including Operator and Fuel (P. XLVIII / I. 19) PWD SR 2018-19	per day	1				1	1288.00	1288.00
	Procurement of Water --Rs. 216.00 / Load (6000 Liters) for 5000 liters =216*5000/6000=Rs 180.00 considering 5 loads/day	Per Load	5				5	180.00	900.00
	Providing Causal Labours (Unskilled mazdoor Heavy) (PWD SR 2018-19 Page No. LVI / I. 5)	Nos	1				1	446.20	446.20
									2977.53
				For 1 Load					595.51
				or Say					596.00
		Rs. 596.00 / Load							
	Dasarahalli Village and Rachenahalli Village Surrounding area Considering 2 Tractors 5 Loads/Day and for 3 Months 2 X 5 X 90 X 596.00=								536400.00
	Thaniandra and Hegadenagara Surrounding area Considering 2 Tractors 5 Loads/Day and for 3 Months 2 X 5 X 90 X 596.00=								536400.00
									1072800.00
2	Geophysical investigation of site for sinking borewell for supplying drinking water to the habitation either through the hand pump, MWS or P.W.S.S. by vertical electrical sounding by adopting venner or schlumbergers's method, including reconnaissance survey of geological formation, Geological investigation of existing ground water in vicinity, its quality, quantity & acceptability of the users indicating the location of site, recommended depth of casing pipe required to seal the top unconsolidated formation including an extra depth of 1.0 mtr in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site, engaging technical personal and labour required etc (P.NO-47,	Each BW	3				3	1938.46	5815.00
	Basic Rate	1882.00							
	3% area weightage	56.46							
	Total	1938.46							

3	Sinking of borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & abo[redacted] 900 CMF & above in all strata including over budern upto 20 m. fixing of casing pipes, collars & cap with necessary cutting, threading & welding including transportation of rig and supporting vehicle, crew charges & cost of consumables etc., complete including yield testing at the final depth with minimum working of compressor for one hour(excluding cost of casing pipes, collars, cap etc.,) (P.NO-47, I.NO-	Rmtr							
a	0 to 50 m		3	50.00			**150.00**	315.18	**47277.00**
b	50 to 100 m		3	50.00			**150.00**	412.00	**61800.00**
c	100 to 150 m		3	50.00			**150.00**	458.35	**68753.00**
d	150 to 200 m		3	50.00			**150.00**	484.10	**72615.00**
e	200 to 250 m		3	50.00			**150.00**	560.32	**84048.00**
f	250 to 300 m		3	50.00			**150.00**	600.49	**90074.00**
g	300 to 370 m		3	70.00			**210.00**	622.00	**130620.00**
4	Supplying of ISI Mark 175 mm nominal bore medium black ERW casing pipe of 5mm thick black electric resistance continous welded midle steel tube material confirming to IS 1387/1993 and manufactured from hot rolled steel skelp/stripes in random length of 4 to 7 mtr both ends threaded confirming to IS 554/1985 one end(including of all taxes) (P.NO-III, I.NO-84, PRED 12-13 SR)	Rmtr							
			3	60.00			**180.00**	1364.75	**245655.00**
	Basic Rate	1325.00							
	3% area weightage	39.75							
	Total	**1364.75**							
5	Providing and fixing **250mm dia PVC pipe** and as per specification and directions. (BWSSB SR 13-14, P.No.53 I.no.1 of sl.no.11.)	Rmtr							
			3	12.00			**36.00**	1133.00	**40788.00**
	Basic Rate	1100.00							
	3% area weightage	33.00							
	Total	**1133.00**							
6	175 mm dia **M.S. Casing cap** (P.NO-III, I.NO-85, PRED 12-13 SR)	Each							
			3				**3**	103.00	**309.00**
	Basic Rate	100.00							
	3% area weightage	3.00							
	Total	**103.00**							
7	M.S. **Casing pipe collars** 'C' Class (P.NO-III, I.NO-86, PRED 12-13 SR)	Each	3	10			**30**	154.50	**4635.00**
	Basic Rate	150.00							
	3% area weightage	4.50							
	Total	**154.50**							

8	**Fabricating supplying and mounting MS box** of 16 SWG suitable for floor / wall mounting, fully weather proof with provision for better hear description, (providing with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished 2 coats of red oxide primes paint and finally finished with approved colour enamelled metal paint etc,. complete box of 21600 sq cm (P.NO-530, I.NO-39 b, BWSSB SR 13-14)	Sqmm							
	New out door box		3	1100.00	20.00		66000.00		
	For replacing damaged boxes		5	1100.00	20.00		110000.00		
							176000.00	0.34	**59840.00**
	Basic Rate	0.33							
	3% area weightage	0.01							
	Total	**0.34**							
9	Labour charges for **erection of new /repaired submersible pumpset** along with GI pipes (32/50mm) cable (new submersible pumpset if required will be supplied by the department free of cost and released pump set should be handed over to department) including transportation (each length = 6.00m) (P.No - 564, I.No - 3, BWSSB SR 13-14)	Per length							
			3	50.00			**150.00**	90.64	**13596.00**
	Basic Rate	88.00							
	3% area weightage	2.64							
	Total	90.64							
10	Erection of combined **panel board meter board** with all necessary materials and labour including providing CC 1:3:6 foundation bed etc,. Complete for basement out door type. (MR)	No's							
			3				**3.00**	475.00	**1425.00**
11	Supplying and fixing of **Porcelain fuse channel** with cut out on existing wooden / panel using necessary nuts, bolts and washer etc., complete.... **P No. 32/I No 3b KPWD Electrical SR 2010-11**	No.							
	63 Amps		3	3			**9.00**		
							9.00	150.00	**1350.00**
12	Supplying and laying of **L.T.U.G Cable** having aluminiumconductor PVC insulated shethed galvanised steel wire/ steel tape armoured cable with PVC outer sheathing 1.1 KV class 4 core 16 sqmm cable (confirming to IS 1554) (P.NO - 553, I.NO - 10 (d), BWSSB SR 13-14)	Mtr							
			3	35.00			**105.00**		
	Additional UG Cable		1	80.00			**80.00**		
	Basic Rate	165.00					**185.00**	169.95	**31441.00**
	3% area weightage	4.95							
	Total	169.95							

13	**Digging of trenches of 0.6mm x 0.50** Mtrs wide refilling the trench to the required ground level and consolidating etc,. Complete sutting roa surfaces (P.NO - 554, I.NO - 12 (b), BWSSB SR 13-14)	Mtr							
			3	35.00			**105.00**		
	For Addtional		1	80.00			**80.00**		
	Basic Rate	55					**185.00**	56.65	**10480.00**
	3% area weightage	1.65							
	Total	56.65							
14	Supplying and fixing **Class-A GI Pipe** on pole/ wall/drain crossing with necessary clamping arrangements for UG Cable of 1.1 KV class 40mm (P.NO - 555, I.NO - 15 (b), BWSSB SR 13-14)	Mtr							
			3	3.00			**9.00**	294.58	**2651.00**
	Basic Rate	286.00							
	3% area weightage	8.58							
	Total	294.58							
15	Supplying and fixing wiring **earth electrode for grounding conduits,** IC cutouts and other equipments on the meter board using 40mm dia 2.90 mm thick GI pipe 2.5 mtr long buried in a pit,/ the pit should be filled with equal proportion of salt and charocal 150 mm alround the pipe to complete depth the connections from the pipe to the conduit etc,. is to be established though GI wire of size as per ISI specification 7.3.3 of ISI 732 using 12mm dia boalts, nuts washers and checknuts etc,. the pipe shall have 16 through holes of 122mm dia	No's							
			3				**3.00**	1699.50	**5099.00**
	Basic Rate	1650.00							
	3% area weightage	49.50							
	Total	1699.50							
16	**Supply and fixing LT cast iron pot heads** suitable for 1.1 KV class 16 sqmmUG cable filled with necessary bitumen/ insulating compound complete with terminals, clamps, bolts nuts and washers etc, (P.NO - 555, I.NO - 16 (b) , BWSSB SR 13-14)	No's							
			3				**3.00**	271.92	**816.00**
	Basic Rate	264.00							
	3% area weightage	7.92							
	Total	271.92							
17	Supplying and fixing of **polished wood board** made of not less than 15mm thick plank on both sides with planks made out on not more than 2 pieces and fixing the same to wall using tapered inverted wooden plugs screws etc., Size 20 x 20 x 2.5 inches (P.NO - 521, I.NO - 2 (f), BWSSB SR 13-14)	No's							
			3				**3.00**	311.58	**935.00**
	Basic Rate	302.500							
	3% area weightage	9.075							
	Total	311.575							

18	**Borewell Cap and Clamp Set** (PWD SR 2018-19, Page No. XLVII, Sl nO. 17)	Set	3				**3.00**	1800.00	**5400.00**
19	Supply & delivery at site brand new texmo/innoval/lubi/sabar /Atalanta/calamal/ waterman/Radha make **suitable HP deep well submercible pumpset suitable for vertical installation in 150 dia borewells** compressing of single stage or multistage CF pump close coupled by means of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water squirrel cagesubmercible induction motor suitable for operation of 3Ph, 50Hz.380/440 volts AC supply fitted with required accessories such as suction, casing, suction strainers, sand guard. Non return valve etc Complete the pump and motor shall from an integral unit with all the required fittings e (P.NO-XLV PWD SR 18-19)	No							
a	15 HP 35 Stage		3				3		
	15 HP pump -motor (Additional Pump- motors for replacing existing damaged pump-motor) **P. No XLII It 44**		6				9/6		
	Basic rate	**67724.00**					**9**	67724.00	**609516.00**
b	10 Hp HP pump -motor (Additional Pump-motors for replacing existing damaged pump-motor)**P NO XLI It 31**		2				**2**	58466.00	**116932.00**
	Basic rate	**58466.00**							
20	Providing, laying & jointing **GI pipes** confirming to IS specification of approved make with fittings such as collars bends elbows tees nipples plugs with cuts threads using white lead & threads for joints wherever necessary as per direction including all lead & lift etc,. complete 'A' grade(excluding cost of fittings) 50mm dia GI pipe B Class (SR 18-19 PWD, P.No.XLVII Sl.no. 1	Rmtr							
			3	330.00			990.00		
	For Additional GI Pipe		1	300.00			300.00		
							1290.00	415.00	**535350.00**
	Basic Rate	415.00							
21	**Supply and fixing Collar** for GI Pipes 50MM (Page No. XLVII, Sl NO.2, PWD SR-2018-19	No's	3	55			**165**		
	For Additional GI Collar		3	50			**150**		
							315	180.00	**56700.00**
22	**Supplying of submersible pump cable** 1X3X6..0 Sq.mm (Page No. XLVII, Sl NO. 8, PWD SR-2018-19	Mtr							
			3	680.00			2040.00		
							2040.00	144.00	**293760.00**

23	Supplying & delivery at site brand new / Essen / Lotus sunsines/Adarsh/ Gk controls best indigenous make combine **energy meter-cum-control panel board unit** of size 1200 x 600 x 300 mm minimum mechanically strong and vermin and water proof the unit shall have two detachable doors suitable for operation on 3ph, 50Hz, 380/440 volts, AC supply with spring loaded latch locking with a key ribs should be provided inside the door , canopy apron and louvers ventilators shall be provided the combine energy mtr cum control panel board unit suitable for operation on 3ph, 50Hz, 380/440 AC supply shall be consisted etc,. completed T panel board shall be fabricated on single unit in the above components panel board for suitable pumpset above components panel board for suitable pumpset above Up to 20HP with star delta starter (MR) Page No.	No.							
			3				**3.00**	21000.00	**63000.00**
24	Supplying & delivery of brand **50mm Gate Valve.** (PWD SR 18-19, P.NO.XLVII Sl.no, 15	No's							
			3				**3.00**	1800.00	**5400.00**
25	Supplying & delivery of brand **50mm Non Return** Valve. (PWD SR 18-19, P.NO.XLVII Sl.no, 16	No's							
			3				**3.00**	1800.00	**5400.00**
26	Supplying and fixing **MCB** (P.NO - XLVII, SL.NO - 19, PWD SR 18-19)	No's							
			3				**3.00**	900.00	**2700.00**
27	Earthwork excavation for foundation of buildings, **water supply,** sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in Ordinary soil not exceeding 1.5 m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods complete as per specifications (P.NO - 6, I.NO - 2.3, PWD SR 18-19)	Cum							
			3	250.00	0.60	0.75	**337.50**		
	Pipes		1	2060.00	0.60	0.75	**927.00**		
							1264.50	316.94	**400771.00**
	Basic Rate	299.00							
	6% area weightage	17.94							
	Total	316.94							

28	Providing and installing at site of work **63mm (0.662) PVC Pipes of 6 kg / cm2** including cost of pipes and specials and labour, including lowering into trenches, laying true to line, level and perfect linking at joints leak proof including jointing of approved type with all labour and lift charges, handling charges including encasing the pipe alround to a depth not less than 15cms with gravel or selected earth available from the excavation etc., complete (P.NO - 94, I.NO - 13.73.2, PWD SR 18-19)	Mtr							
			3	250.00			750.00		
	Additional Pipelines and Replacing Damage		1	2060.00			2060.00		
							2810.00	394.32	**1108039.00**
	Basic Rate	372.00							
	6% area weightage	22.32							
	Total	**394.32**							
29	Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m and lift upto 1.5m including cost of all labour complete as per specifications (P.NO - 7, I.NO - 2.11, PWD SR 18-19)	Cum							
			3	250.00	0.60	0.75	337.50		
	Additional Pipelines and Replacing Damage		1	2060.00	0.60	0.75	927.00		
							1264.50	128.26	**162185.00**
	Basic Rate	121.00							
	6% area weightage	7.26							
	Total	**128.26**							
30	BESCOM Deposit charges	No's	3				**3.00**	14500.00	**43500.00**
		Total of Other SR Items including GST Unit Rate							**980022.00**
		Total of PWD SR 2018-19 Items							**4481453.00**
31	For 12% GST for Only PWD SR-2018-19 Items								**537774.00**
32	Miscellaneous and Unforeseen Charges	L/S							**751.00**
								Total	**6000000.00**
	(Rs Sixty Lakhs only)								

CERTIFICATE :

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per PWD SR 2018-19, PRED and BWSSB SR of Rural Engineering Department
4 The provisions were made in this estimate are necessary and adequate.
5 This works come under B.B.M.P. limits.

Assistant Engineer
Ward No 6

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike

Executive Engineer
Bruhat Bangalore Mahanagara Palike

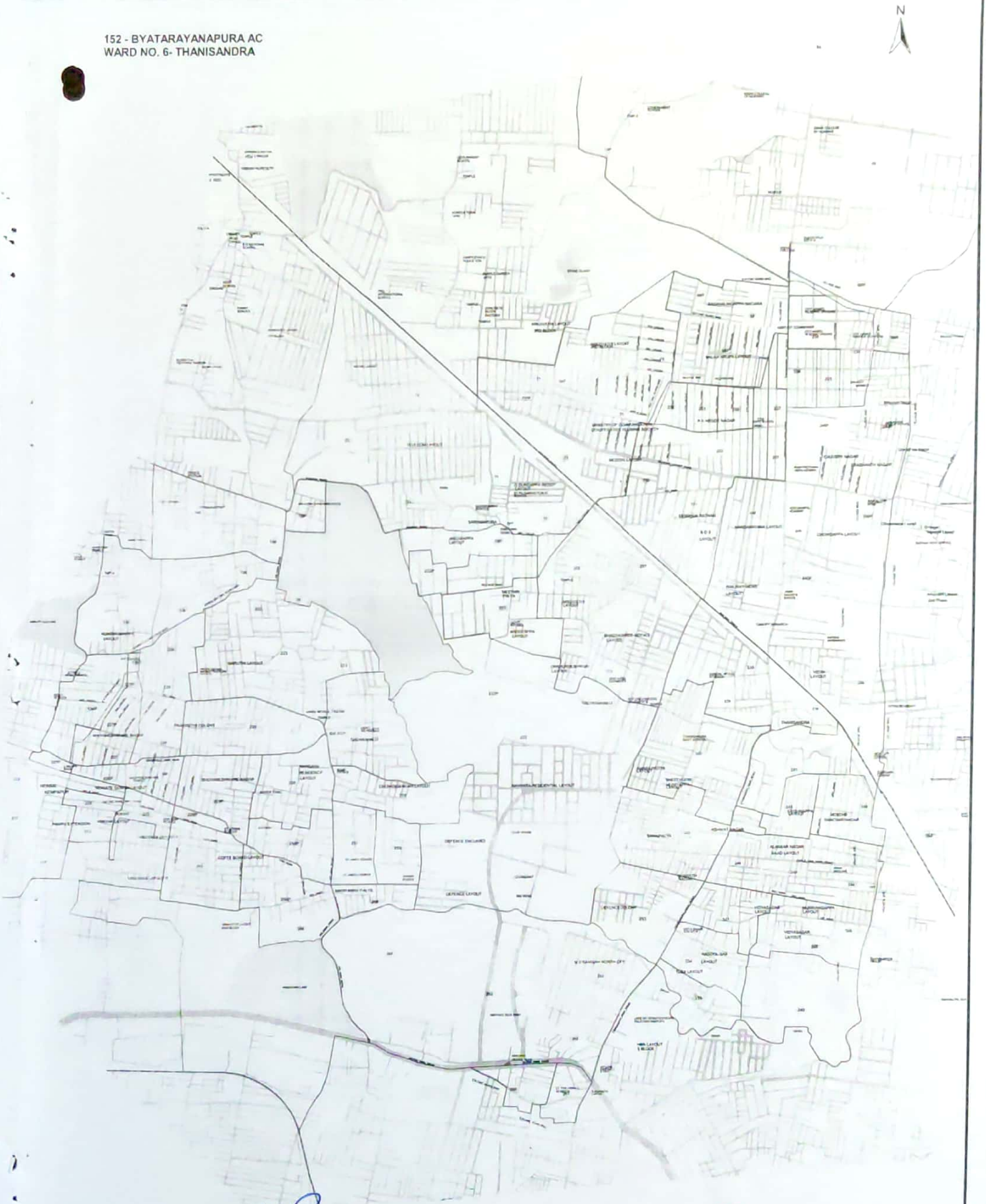
Technical Sanction
Accorded For Rs 60.00 Lakhs only
Head of A/C P3602
CER NO : 04 Dt: 22.05.2020

TA CE (WNK)

ADMINISTRATIVE APPROVAL
Accorded For Rs. 60.00 Lakhs only
Head of A/c. P3602
Div. Ref. No. 08/20-21 Date 19-5-2020

AE EE(BTP) 19/5

152 - BYATARAYANAPURA AC
WARD NO. 6- THANISANDRA



ಸಹಾಯಕ ಅಧಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಧಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
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